Claims

1. A method for processing location information request initiated by a User Equipment (UE), comprising:

A1. a target UE requesting a Central Network (CN) for location information of the target UE, and the CN obtaining a location estimate of the target UE;

B1. the CN sending the location estimate of the target UE to a Visited Gateway Mobile Location Center (V-GMLC) of the target UE.

2. The method according to claim 1, wherein, the step B1 comprises:

according to a pre-stored V-GMLC address information, the CN sending the location estimate of the target UE to the V-GMLC.

3. The method according to claim 1, wherein, after the step B1, further comprising:

the V-GMLC generating charging information of the target UE.

4. The method according to claim 1, wherein, after the step B1, further comprising:

the V-GMLC returning to the CN a response for the location estimate of the target UE.

5. The method according to any of claims 1~4, wherein, the step A1 further comprises:

the target UE providing the CN with a requester identifier;

the step B1 further comprises:

the CN providing the V-GMLC with the requester identifier; and

after the step B1, further comprising:

C1. the V-GMLC sending the location estimate of the target UE to the requester.

6. The method according to claim 5, wherein, the step C1 comprises:

C111. the V-GMLC determining whether the V-GMLC can directly access the requester according to the requester identifier, if the V-GMLC can directly access the requester according to the requester identifier, the V-GMLC directly sending the location estimate of the target UE to the requester, otherwise, proceeding to step C112;

C112. according to the requester identifier, the V-GMLC finding a GMLC that can directly access the requester, and sending the location estimate of the target UE to the requester through the GMLC.

7. The method according to claim 6, wherein, after the V-GMLC sending the location estimate of the target UE to the requester in the step C111, further comprising:

the requester returning a first response for the location estimate of the target UE to the V-GMLC, and the V-GMLC returning a second response for the location estimate of the target UE to the CN.

8. The method according to claim 6, wherein, after the step C112, further comprising:

the requester returning a first response for the location estimate of the target UE to the GMLC, the GMLC returning a second response for the location estimate of the target UE to the V-GMLC, and the V-GMLC returning a third response for the location estimate of the target UE to the CN.

9. The method according to claim 5, wherein,

the step A1 further comprises:

the target UE providing address information of the GMLC that can access the requester to the CN;

the step B1 further comprises:

the CN providing the address information of the GMLC to the V-GMLC; and

the step C1 comprises:

C121. the V-GMLC receiving the location estimate of the target UE and sending the location estimate of the target UE as well as the requester identifier to the GMLC according to the address information of the GMLC;

C122. the GMLC receiving the location estimate of the target UE and sending the location estimate of the target UE to the requester according to the requester identifier.

10. The method according to claim 9, wherein, after the step C122, further comprising:

the requester returning a first response for the location estimate of the target UE to the GMLC, the GMLC returning a second response for the location estimate of the target UE to the V-GMLC, and the V-GMLC returning a third response for the location estimate of the target UE to the CN.

11. The method according to any of claims 1~4, wherein, the CN is any one of:

a Mobile Switch Center (MSC), an MSC Server and a Serving GPRS Support Node.

12. A method for processing location information request initiated by a User Equipment (UE), comprising:

A2. a target UE requesting a Center Network (CN) for location information and providing a requester identifier, the CN obtaining the location estimate of the target UE;

B2. the CN sending the location estimate of the target UE to a V-GMLC of the target UE;

C2. the V-GMLC sending the location estimate of the target UE to a H-GMLC; and

D2. the H-GMLC sending the location estimate of the target UE to the requester.

13. The method according to claim 12, wherein, after the step B2, further

comprising:

the V-GMLC generating charging information of the target UE.

14. The method according to claim 12, wherein, after the step C2, further comprising;

the H-GMLC generating charging information of the target UE.

15. The method according to any of claims 12~14, wherein, the step D2 comprises:

D211. the H-GMLC determining whether the H-GMLC can directly access the requester according to the requester identifier, if the H-GMLC can directly access the requester according to the requester identifier, the H-GMLC directly sending the location estimate of the target UE to the requester, otherwise, proceeding to D212;

D212. according to the requester identifier, the H-GMLC finding a GMLC that can directly access the requester and sending the location estimate of the target UE to the requester through the GMLC.

16. The method according to claim 12, wherein, after the H-GMLC sending the location estimate of the target UE to the requester in step D211, further comprising:

the requester returning a response for the location estimate of the target UE to the H-GMLC, the H-GMLC returning a response for the location estimate of the target UE to the V-GMLC, and the V-GMLC returning a response for the location estimate of the target UE to the CN.

17. The method according to claim 15, wherein, after the step D212, further comprising:

the requester returning a response for the location estimate of the target UE to the GMLC, the GMLC returning a response for the location estimate of the target UE to the H-GMLC, the H-GMLC returning a response for the location estimate of the target UE to the V-GMLC and the V-GMLC returning a response for the location estimate of target UE to the CN.

18. The method according to any of claims 12~14, wherein,

the step A2 further comprises:

the target UE providing address information of the GMLC that can access the requester to the CN;

the step B2 further comprises:

the CN providing the address information of the GMLC to the V-GMLC;

the step C2 further comprises:

the V-GMLC providing the address information of the GMLC to the H-GMLC; and

the step D2 comprises:

D221. the H-GMLC receiving the location estimate of the target UE and sending the location estimate of the target UE as well as the requester identifier to the GMLC according to the address information of the GMLC;

D222. the GMLC receiving the location estimate of the target UE and sending the location estimate of the target UE to the requester according to the requester identifier.

19. The method according to claim 18, wherein, after the step D222, further comprising:

the requester returning a first response for the location estimate of the target UE to the GMLC, the GMLC returning a second response for the location estimate of the target UE to the H-GMLC, the H-GMLC returning a third response for the location estimate of the target UE to the V-GMLC and the V-GMLC returning a fourth response for the location estimate of target UE to the CN.

20. The method according to any of claims 12~14, wherein, the CN is any one of:

a Mobile Switch Center (MSC), an MSC Server and a SGSN.